

DCA13MR002
Conrail - Shared Assets
Derailment/Hazardous Material Release
Paulsboro, New Jersey
November 30, 2012

Hazardous Materials Group Factual Report

ATTACHMENT 13 - CERTIFICATE OF
CONSTRUCTION FOR OCPX 80323 AND 80305

APPLICATION FOR APPROVAL AND CERTIFICATE OF CONSTRUCTION

Page 1 of 2

1 APPROVAL REQUESTED OF: ☐ PRECEDENT ☒ NON PRECEDENT

2 TYPE: ☒ CONSTRUCTION ☐ WELDED REPAIRS ☐ ALTERATION ☐ OTHER ☐ CONVERSION

3 AAR NO: L066049A

4 DATE: JANUARY 19, 2006

5 APPLICANT'S NO: T05012

6 APPLICANT: TRINITY INDUSTRIES, INC.
P.O. BOX 568887 DALLAS, TEXAS 75356-8887

7 TANK SPECIFICATION: DOT 105A300W

8 STENCILED SPEC: DOT 105J300W

9 REPORTING MARKS & CAR NUMBERS: OCPX 80301 thru OCPX 80375

10 NUMBER OF CARS: 75

11 Initial commodity	SEE NOTES	12 Density, lb. per gallon	7.60
13 Full water capacity, gal.	24,500	14 Dome capacity or outage, gal.	Per DOT 173.24b(a)(1)
15 Material type & grade - heads	AAR TC128 Gr. B NORM.	16 Material type & grade - shell	AAR TC128 Gr. B NORM.
17 Material thickness - heads, in.	0.5625	18 Material thickness - shell, in.	0.5625
19 Lining type	NONE	20 Inside diameter - center, in.	116
21 Inside diameter - end rings, in.	116	22 Head radius, main, in. (if not 2:1)	2:1 ELLIPSOIDAL
23 Test pressure, psig	300	24 Insulation type	SEE PAGE 2
25 Insulation thickness, in.	4	26 Thermal conductivity, Btu-in/hr-ft ² -°F	0.257
27 Type and number of pressure relief devices	ONE VALVE	28 Pressure relief device start-to-discharge, psig	247.5
29 Pressure relief device flow cap'y., scfm req'd.	281 *	30 Pressure relief device flow capacity, scfm, actual	22,598
31 Tank surface area, sq. ft.	1480	32 Underframe or stub sill type	Stub Sill---TRN 023
33 Center of gravity, loaded, in.	88.13	34 Est. light weight, lb.	80,200
35 AAR clearance diagram	C	36 Rail load limit, lb.	263,000
37 Truck capacity, tons	100	38 Head Shields	Full diameter--1/2" thick steel ASTM A572-50

NOTES: Vinyl Chloride, Inhibited and products authorized in DOT Part 173 for which there are no special commodity requirements and nonregulated commodities compatible with this class of car.

Orig. Cert.

Builder

Date

Former lading

*Gi = 5.485 for Vinyl Chloride at start-to-discharge pressure of 247.5 psig per Table A5.

The Following Drawings Apply	Drawing Number	The following prior approvals apply:	
		Drawing Number	Application/Certificate No.
39 General Arrangement	D-41774		
40 Tank Arrangement	D-43805 SH. 1		
41 Reinforced Openings	D-43805 SH. 2A & 3		
42 Bolster & Draft Sill Arrangement	D-340355-01 SH. 1A & 2A		L056043
43 Fittings Arrangement	D-54133 SH. 1A, 2A & 3A		
44 Manway Assembly	D-340016G		L996083A
45 Protective Housing	D-443514A		
46 Venting, Loading and Discharge Valves	See Page 2		
47 Pressure Relief Devices	MIDLAND A-34247		PRD 022020
48 Heater Systems (Int <input type="checkbox"/> Ext <input type="checkbox"/>)	NONE		
49 Gauging Devices	MIDLAND B-612		E002003
50 Bottom Outlet Valve	NONE		
51 Jacket Anchor	D-46344B		L986040
52 Manway cover	D-543697A		
53 Calculations	D-343978A		L036013
54 Tank Qualification Drawing	D-41789		

REVISIONS:

Jan. 26, 2006-Rev. A: Correct drawing errors on drawings
D-43805 sh. 2 & D-54133 sh 1, 2, 3.

APPLICATION BY: William R. Bitting

I certify that the foregoing conforms to all applicable DOT and AAR requirements including Specifications, Regulations, Rules of Interchange, and the DOT Railroad Safety Appliance Standards.

SIGNATURE

TITLE

Senior Design Engineer

APPROVAL - AAR Tank Car Committee

Date Approved

FEB 24 2006

Signature on behalf of Tank Car Committee

CERTIFICATION: The cars enumerated below conform to the above approved description and to all applicable DOT and AAR requirements including Specifications, Regulations, Rules of Interchange and the DOT Railroad Safety Appliance Standards. Copy of this Certificate of Construction will be furnished to the owner and others as required by 49 CFR Part 179.5 before these cars are placed in service.

Initials and Car Numbers:

OCPX 80301 - 80375

Form AAR 4-2 Revised 12/1/00

Name

Title

Director Quality Assurance

Date 3-2-06

AAR Number L066049A
Applicant's No T05012
Date: January 19, 2006

APPLICATION FOR APPROVAL AND CERTIFICATE OF CONSTRUCTION

LINE 46.- VENTING, LOADING AND DISCHARGE VALVES

THESE ARE THE VALVES AND FITTINGS REFERENCED ON FITTINGS ARRANGEMENT D-54133


1. MIDLAND A-720, 2" ANGLE VALVE (QTY = 3) -----AAR E002013
2. MIDLAND A-167, 3" LIQUID EXCESS FLOW CHECK VALVE (QTY = 2) -----AAR E022001
3. MIDLAND A-146, 2" VAPOR EXCESS FLOW CHECK VALVE (QTY = 1) -----AAR E022002
4. MIDLAND A-119-W, 1-1/4" X 3/4" EXCESS FLOW CHECK VALVE (QTY = 1) ----AAR E999024
5. MIDLAND A-257, 3/4" NEEDLE VALVE (QTY = 1) -----AAR E022006

LINE 24 - INSULATION : Four inch thick layer of Glasswool Blanket over 1/2" thick Ceramic
Fiber with the total thickness compressed to 4"

Cars are constructed in accordance with all applicable DOT/TC and AAR requirements.
Car body structure meets the requirements of S-286-2002.

APPLICATION BY William R. Bitting

I certify that the foregoing conforms to all applicable DOT and
AAR requirements, including Specifications, Regulations, Rules
of Interchange and the DOT Railroad Safety Appliance
Standards.

SIGNATURE 
TITLE Senior Design Engineer

APPROVAL AAR Tank Car Committee

Date Approved

FEB 24 2006

(Signature) on behalf of Tank Car Committee

OCPX 80350, 80365, 80369-80371. 80373-80375

Quote Number	2004/432	File / Rev / Date / Engineer	T05012A / 1 / 3-15-2006 / MLV
Model Number	257-105J300	RFQ Date / Engineer	11/17/2004 / WJW
Customer	Occidental Chemical Corp.	Number Of Cars	8
Capacities			
Shell Capacity	24,500 Gal.	Sized For	Vinyl Chloride, Stabilized
Outage - 2%	N/A	Tank Specification	DOT105A300W
Maximum/Effective Capacity	182,800#	Stenciled Specification	DOT105J300W
Allowable Weight/Gal.	N/A	Est. Light weight	80,200#
Clearance Diagram	Plate C	Maximum Gross Weight	263,000#
Car Dimensions			
Tank	117 1/8" OD X 41'-5 1/4" Tan to Tan	Head Material & Thickness	9/16" AAR TC128 Gr. B Norm.
Length OCPF	52' 0 3/4"	Shell Material & Thickness	9/16" AAR TC128 Gr. B Norm.
Slope	1/16" Per Foot	Truck Centers	38' 6 1/4"
Top Fittings			
Manway	20" I.D. Normalized Flued A516 Gr. 70 Nozzle	Manway Cover	Bolted ASTM A516 Gr. 70 Normalized
Air/Vapor Connection	2" Flanged X Screwed Midland A-720 Angle Valves w/ 2" CS Plugs And A-146 SS Check Valve Below Cover Plate	Protective Housing	34" ID CS Shell w/ CS Cover Hinged 45 Deg. Off The Long. Centerline To The BR End w/ Lift Assist
Discharge Connection	Two 2" Flanged X Screwed Midland A-720 Angle Valves w/2" CS Plugs	Discharge Pipe	(2) 3" Sch 80 316L SS Pipes w/ Midland A167 SS Check Valves And CS Guide & Pads
Gage Device	Midland B612S w/ 48" Gaging & Threaded Mounting (7.6# / gal)	Outage Scale	None
Safety Relief	Valve, 247#, Midland A-34247	Vacuum Relief	None
Sample Line	3/4" Sch 80 304L SS Pipe w/Midland A257 Needle Valve & A119W Check Valve	Thermowell	3/4" Nitronic 60 Plug
Fittings Nozzle	None		
Bottom Fittings			
Outlet Valve	None	Outlet Saddle	None
Outlet Fittings	None	Sump	None
Gasket's/O'Rings			
Manway Cover	Durlon 9000	Safety Relief Gasket/O'Ring	Durlon 9000 / Viton A
Air Inlet	Durlon 9000	Outlet Valve	None
Discharge Conn.	Durlon 9000	Outlet Fittings	None
Gage Device	Durlon 9000 / Buna-N weather seal o-ring	Thermowell Cap	None
Coils	None	Inlets / Outlets	None
Insulation & Jacket			
Insulation Type	4" Fiberglass Over 1/2" Ceramic Fiber	Jacket Head / Shell	1/2" A572 Gr. 50 / 11 Ga. CS
Platforms			
Top	Divided Type 9-1/2" Wide X 8' Long CS Plank Grating w/ Side Ladders (Hemple 418US Non-Skid On Jacket Between Grating)	End	Single 11 1/2" Wide X Full Width Long CS Plank Grating
Underframe			
Type & Section	Type 23 Stub Sill	Draft Gear	M-901-E Miner TF880
Brakes	Body Mounted w/10 X 12 Cyl. And Vertical Wheel Handbrake	Couplers & Yokes	SE60EE / SY40AE
Center Plate	16" Forged	Empty Load Brakes	Yes
Trucks			
Capacity/Type	ASF Super Service Ride Master with bolted-only column wear plates.	Wheels / Bearings	36" 1 Wear Class C Wheels 6-1/2 X 12 Roller Bearings
Springs	3-11/16" Travel D-5	Roller Bearing Adapters	Hardened Crowns & Shoulders
Side Bearings	ASF 4500LT Constant Contact	Brake Beams	#18 Unit Type
Surface Prep			
Interior	Note 5		

OCPX 80350, 80365, 80369-80371. 80373-80375

Quote Number	2004/432	File / Rev / Date / Engineer	T05012A / 1 / 3-15-2006 / MLV
Model Number	257-105J300	RFQ Date / Engineer	11/17/2004 / VJJW
Customer	Occidental Chemical Corp.	Number Of Cars	8

Paint, Stencil, Lining

Paint	Two Coat Blue/Gray Epoxy / Urethane (Hempe 4563 / 595)	Stencil	AAR / DOT / Yellow Reflective Decals / Commodity stencil
Lining	None		

NOTES

1. Cars are equipped w/ resilient wear liner package (i.e., horizontal bowl liner, coupler carrier wear plate, and brake beam guides)
2. Protective housing includes patented "Anti-Tampering Security System".
3. Cars are equipped w/ two brass grounding studs on diagonally opposite corners of top platform.
4. Cars will include a jacket recess in the side ladder area.
5. Internal (SP-7 brush off) blast. Purge car with nitrogen to a dew point of minus 20 degrees F with a 15# pad.
6. Vertical portions of the end handrails along w/ the end sill steps will be coated w/ anti-skid paint.
7. No lessee stencil.